
The introduction of levodopa for the drug treatment of Parkinson's disease constituted a considerable advance in the therapeutic of that condition and there is no doubt that the lot of many patients has been markedly improved as a result. Nevertheless, the drug can cause problems. It is often necessary to use very large doses and the process of building up to the optimal amount may be time-consuming and tedious for the patient and physician alike. The high doses are needed because only a small proportion of the drug actually reaches the dopamine-deficient striatum as the rest is metabolized before it crosses the blood brain barrier. These high doses of the drug in the periphery are responsible for the undesirable side effects frequently encountered, like nausea and vomiting which either limit the amount that can be given to a particular patient or, in some instances, actually preclude the use of the drug altogether. The introduction recently of dopa decarboxylase inhibitors has changed things to some extent, for with these the amount of levodopa that is metabolized in the periphery is reduced, whereas the central effects are unaltered because the inhibitors do not cross the blood brain barrier. The consequence of this is a reduction in the dose needed, a reduction in side effects due to the peripheral (but not the central) actions of the levodopa and a greater ease of introduction and adjustment of the dose for a given patient.

In essence, this is the background to the present book which is a report of a symposium held in November 1972 at Columbia University. It contains a number of papers on the mechanisms of action of levodopa in the disease, on the enzymology of central nervous system monoamines and on their sites of action. These are followed by several papers on the effects of combining levodopa with various other agents and the consequences of these combinations for the patients. There is a detailed bibliography on the whole subject of extracerebral decarboxylase inhibitors.

The book has a rather narrow appeal for it is primarily of interest to neurologists, but it should contain something of interest for those who are less directly concerned with the treatment of neurological diseases but who are nevertheless interested in central nervous system neurotransmitter substances and the role they may play in the evolution of a variety of conditions. Amongst this number may be some geneticists, although it has to be conceded that to most the investment would not really be worth while. This in no way denies the general value of the book, for it is a succinct and, for the most part, readable account of an interesting and growing subject.

DAVID L. STEVENS


This book reviews developments in our knowledge of XYY males and those with Klinefelter's syndrome. It takes the story up to 1970 and presents in addition much epidemiological and clinical data based on large scale studies by the author in southern Germany.

As stated by the author, much of the data in his review is taken from the latest editions of the textbooks. It presents, however, a more complete and up-to-date picture of the syndrome. Readers wishing to read about the development of the XYY story would be better advised to refer to the latter publication.

In Dr Murken's review a few steps are omitted in the historical sequence of development of our ideas and there is some over-simplification in the presentation of the results of other authors. In addition, different language idioms and some lack of clarity in the use of words such as 'weak-minded' and 'mental' would make the book confusing for those not familiar with the original publications. Lack of clarity in the language leads to loss of clear distinction between mental subnormality, mental illness, and criminality.

The main part of the book describes cytogenetic screening surveys of about 2500 individuals from a variety of groups; newborn, social deviants, and patients with congenital deformities. Very full case histories of patients with chromosome abnormality are provided; investigations include psychological studies and anthropometry with testicular histology in a few cases. Inevitably the small number of probands with chromosome abnormality and the selection of patients from within institutions must lead to caution in the interpretation of results. The predisposition of XYY males as well as XYY to socially inadequate behaviour is emphasized.

This book can be recommended to research workers interested in the relationship between criminality,